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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,827	01/11/2002	Sally Kay Swart	163.1386USUI	7890
23552	7590	04/06/2004	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			BECKER, DREW E	
			ART UNIT	PAPER NUMBER
			1761	

DATE MAILED: 04/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/043,827

**Applicant(s)**

SWART ET AL.

**Examiner**

Drew E Becker

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 8-11, 14-17 and 26-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 8-11, 14-17 and 26-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-3, 8-11, 14-17, and 26-47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claims 1, 16, and 37 recite "significantly reducing the microbial population". It is not clear what level of reduction would be considered "significant".
4. Claims 1 and 37 recite "irradiating the food product... wherein the food product is at least one of pork, fresh vegetables, and fruit;... wherein the food product is at least one of fresh poultry, frozen poultry, and eggs in their shell;...". It is not clear whether all of these various foods are required to be used in the same food product, or whether they are separate foods which are alternatives. Furthermore, it is not clear what level of irradiation is to be used.
5. Claim 26 recites "irradiating the food product... wherein the food product is at least one of fresh red meat;... wherein the food product is at least one of frozen red meat;...". It is not clear whether all of these various foods are required to be used in the same food product, or whether they are separate foods which are alternatives. Furthermore, it is not clear what level of irradiation is to be used.
6. Claims 1 and 37 recite "food additives and food ingredients" with a level of "less than about 5 kGy". It is not clear what types of foods would qualify as being "food

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additives and ingredients” since nearly any food material can be considered a “additive” or “ingredient”. Furthermore, it is not clear what level of irradiation is to be used.

7. Claims 1 and 37 recite “spices, dried vegetable seasonings, and herb” with a level of “less than about 15 kGy”. It is not clear what types of foods would qualify as being “food additives and ingredients” since nearly any food material can be considered a “additive” or “ingredient”. Furthermore, it is not clear what level of irradiation is to be used. In addition, it is not clear what the difference is between food “additives and ingredients” and these “spices, dried vegetable seasonings, and herb”.

8. Claim 37 recites a level of less than about 0.5 kGy for pork, as well as less than 2 kGy for fresh red meat and less than 3 kGy for frozen red meat. However, applicant defines red meat as including pork on page 9 of the specification. It is not clear what level should be used for pork.

### ***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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10. Claims 1-3 and 14-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Todd Jr [Pat. No. 6,099,879].

Todd Jr teaches a method of treating food by contacting it with an anti-microbial agent in the form of sodium tripolyphosphate (column 6, line 28), the food being a seasoning such as rosemary (column 8, line 4), irradiating the food with gamma radiation or an electron beam (column 6, line 5), the use of 4.5 kGy (column 9, line 5), packaging the food before irradiation (column 8, line 66), washing the surface of the food with the anti-microbial agent (column 6, line 10), the food being meat, fish, or poultry (column 5, line 35), and the gamma radiation being produced by cobalt-60 (column 9, line 5).

11. Claims 1-3, 14-15, 26-28, and 33-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Ottke et al [Pat. No. 3,057,735].

Ottke et al teach a method of treating food by contacting it with an anti-microbial agent in the form of a phosphate (column 2, line 59), irradiating the food with gamma radiation (column 3, line 10), the food being pork (column 3, line 23) which qualifies as red meat as defined by applicant on page 9 of the specification, the use of 0.65 kGy (column 3, line 20), packaging the food before irradiation (column 6, line 26), washing the surface of the food with the anti-microbial agent (column 2, line 24), and the gamma radiation being produced by cobalt-60 (column 3, line 11).

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 8-11, 29-32, and 37-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ottke et al as applied above, in view of Hilgren et al [Pat. No. 6,514,556].

Ottke et al teach the above mentioned concepts. Ottke et al do not teach peroxyacetic acid, peroxyoctanoic acid, densified versions of each, fatty acids, and peroxide. Hilgren et al teach a method of treating food by applying peroxyacetic acid (column 6, line 7), peroxyoctanoic acid (column 6, line 9), densified versions of each (column 9, lines 36-60), fatty acids such as octanoic acid (column 3, line 3), and peroxide (column 3, line 4). It would have been obvious to one of ordinary skill in the art to incorporate the compositions of Hilgren et al into the invention of Ottke et al since both are directed to methods of sanitizing food, since Ottke et al already teach the use of other additional anti-microbial agents (column 2, line 63), and since Hilgren et al teach effective antimicrobial agents such as peroxyacetic acid, peroxyoctanoic acid, and densified versions of each (column 6, lines 7-9; column 9, lines 36-60) were commonly applied to meat and fish.

14. Claims 16-17 and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ottke et al as applied above, in view of JP 11339701A.

Ottke et al teach the above mentioned concepts. Ottke et al do not teach the use of tungsten or single-sided irradiation. JP 11339701A teaches a method of irradiating food by the use of a tungsten filament (abstract) and single-sided irradiation (Figure 6). It

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would have been obvious to one of ordinary skill in the art to incorporate the irradiating method of JP 11339701A into the invention of Ottke et al since both are directed to methods of reducing microbial content of foods, since Ottke et al already included irradiation (column 3, line 10), and since the single-sided, tungsten beam of JP 11339701A provided an effective and commonly used means for irradiating food (abstract).

15. Claims 46-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ottke et al, in view of Hilgren et al, as applied above, and further in view of JP 11339701A.

Ottke et al and Hilgren et al teach the above mentioned concepts. Ottke et al and Hilgren et al do not teach the use of tungsten or single-sided irradiation. JP 11339701A teaches a method of irradiating food by the use of a tungsten filament (abstract) and single-sided irradiation (Figure 6). It would have been obvious to one of ordinary skill in the art to incorporate the irradiating method of JP 11339701A into the invention of Ottke et al, in view of Hilgren et al, since all are directed to methods of reducing microbial content of foods, since Ottke et al already included irradiation (column 3, line 10), and since the single-sided, tungsten beam of JP 11339701A provided an effective and commonly used means for irradiating food (abstract).

### ***Response to Arguments***

16. Applicant's arguments filed February 19, 2004 have been fully considered but they are not persuasive.

Applicants argue that Todd Jr does not teach the claimed levels of irradiation. However, Todd Jr clearly teaches the food being a seasoning such as rosemary (column 8, line 4) and the use of 4.5 kGy (column 9, line 5).

Applicants argue that Ottke et al do not teach the claimed levels of irradiation. However, Ottke et al clearly teach the food being pork (column 3, line 23) which qualifies as red meat as defined by applicant on page 9 of the specification, and the use of 0.65 kGy (column 3, line 20).

Applicants argue that Ottke et al do not teach any of the claimed anti-microbial agents. However, Ottke et al clearly teach contacting food with an anti-microbial agent in the form of a phosphate (column 2, line 59).

### ***Conclusion***

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

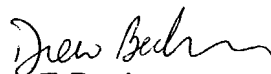


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Drew E Becker whose telephone number is 571-272-1396. The examiner can normally be reached on Mon.-Thur. 8am-5pm and every other Fri. 8am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Drew E Becker  
Primary Examiner  
Art Unit 1761  
4-2-04